Claims

- 1. Process for the production of fludarabine-phosphate lithium, sodium, potassium, calcium and magnesium salts, whereby fludarabine-phosphate is dissolved in water, an alkali or alkaline-earth basic solution is added to this solution while being stirred and at temperatures of below 30°C, and this solution is slowly poured into acetone that is 45-55°C, cooled, and the deposited precipitate is optionally filtered and optionally dried.
- 2. Process for the production of fludarabine-phosphate, whereby the lithium, sodium, potassium, calcium and magnesium salts are produced according to claim 1 and then are released with mineral acid.
- 3. Process for the production of fludarabine-phosphate, whereby the lithium, sodium, potassium, calcium and magnesium salts are produced in a form that is more stable in storage according to claim 1 and them are released with mineral acid.
- 4. Process for the purification of fludarabine-phosphate, whereby crude fludarabine-phosphate is dissolved in water, an alkali or alkaline-earth basic solution is added to this solution while being stirred and at temperatures of below 30°C, and this solution is slowly poured into acetone that is 45-55°C, cooled, and the deposited precipitate is filtered and optionally dried and is obtained in a form that is stable in storage as a lithium, sodium, potassium, calcium or magnesium salt, and then this form that is stable in storage is dissolved in water and acidified

with mineral acid, and the deposited precipitate is filtered and dried.

- 5. Fludarabine-phosphate with a purity of at least 99.5%.
- 6. Fludarabine-phosphate with a purity of greater than 99.55%.
- 7. Fludarabine-phosphate with a purity of greater than 99.6%.
- 8. Fludarabine-phosphate with a purity of greater than 99.7%.
- 9. Fludarabine-phosphate with a purity of greater than 99.8%.
- 10. Fludarabine-phosphate with a purity of greater than 99.85%.

8. Fludar 99.7%.

9. Fludar 99.8%.

10. Fludar 99.85%.